

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A stump grubber (10, 50) comprising a frame (14, 54) incorporating coupling means (13, 53) to couple the stump grubber to a work machine (12, 52), and, supported on the frame,

- two gripping means (32, 34, 36, 70) to grip a stump (38), arranged on opposite sides of the apparatus (50) to pivot around mainly parallel pivot axes (67), the gripping means comprising from 5 to 20 spikes or blades (32, 34, 36, 71–75) arranged to penetrate into and/or under the stump (38), whereby the blades or spikes of one gripping means are arranged along a distance in the direction of its pivoting axis, which distance is no less than 400 mm,

- a cutting blade (18, 58) arranged to cut downwards to sever roots (46) around the stump (38), and

- power means (24, 56) to move the gripping means (32, 34, 36, 70) and the cutting blade (18, 58) relative to each other in at least a substantially vertical direction so that the cutting blade (18, 58) is arranged to be downwardly movable relative to the gripping means (32, 34, 36, 70), and the gripping means (32, 34, 36, 70) are arranged to be upwardly movable relative to the cutting blade (18, 56) in order to lift the stump (38) from the ground (44)[[.]] .

~~characterised in that the gripping means (32, 34, 36, 70) for gripping the stump (38) comprise four or more spikes or blades (32, 34, 36, 71–75) arranged to penetrate into the stump (38).~~

2. (currently amended) A stump grubber according to claim 1, characterised wherein in that the cutting blade (18) is arranged to be at least mainly immovable vertically relative to the frame (14).

3. (currently amended) A stump grubber according to claim 1, ~~characterised~~ wherein in that the gripping means (70) are arranged to be at least mainly immovable vertically relative to the frame (54).

4. (currently amended) A stump grubber according to claim 1, ~~characterised~~ wherein in that the cutting blade (18, 58) comprises a blade that is at least mainly cylindrical in form.

5. (currently amended) A stump grubber according to claim 1, ~~characterised~~ wherein in that the power means (24, 56) are attached to the frame (54) and/or

- the gripping means (32, 34, 36, 70) or
- the cutting blade (18, 58)

by means of a joint (57) that allows the power means to move relative to the frame (54), the gripping means (32, 34, 36, 70) or the cutting blade (18, 58) in a direction other than the direction of the force generated by the power means.

6. (currently amended) A stump grubber according to claim 1, ~~characterised~~ wherein in that it furthermore comprises pivoting means (27, 28, 30, 67, 68, 69) to pivot the gripping means (32, 34, 36, 70) relative to the frame (14, 54) between at least two positions, namely an open position, where the gripping means (32, 34, 36, 70) are intended to be out of contact with the stump (38), and a closed position, where the gripping means (32, 34, 36, 70) are intended to be in contact with the stump (38) and to have a grip on the stump (38).

7. (currently amended) A stump grubber according to claim 6, ~~characterised~~ wherein in that the pivoting means include hinge members (27, 67, 69) and power members (28, 30, 68) to pivot the gripping means (32, 34, 36, 70) relative to the frame (14, 54).

8. (currently amended) A stump grubber according to claim 1, ~~characterised~~ wherein in that the spikes or blades (32, 34, 71–75) are formed in such a way as to slit the stump (38) and, thus to split the stump (38).

9. (currently amended) A stump grubber according to claim 1, ~~characterised~~ wherein in that the spikes or blades (32, 34) are coarsely serrated on their cutting side (48).

10. (currently amended) A stump grubber according to claim 1, ~~characterised~~ wherein in that two blades (32, 34, 71–75) are arranged at least almost on opposite sides of the apparatus (10, 50) to pivot around parallel pivot axes (27, 67)

- asymmetrically so that the said blades are arranged to pass each other in the closed position, or

- symmetrically so that the said blades are arranged to be aligned in the closed position.

11. (currently amended) A stump grubber according to claim 1, ~~characterised~~ wherein in that ~~the gripping means comprises two gripping means (70) arranged on opposite sides of the apparatus (50) to pivot around mainly parallel pivot axes (67), both of which~~ the two gripping means both comprise no less than three blades or spikes (71–75) arranged to be mainly immovable relative to one another.

12. (currently amended) A stump grubber according to claim 11, ~~characterised~~ wherein in that the blades or spikes (71–75) of one gripping means (70) are arranged along a distance, measured in the direction of their pivot axis (67), of ~~no less than 200 mm, preferably no less than 400 mm and even more preferably no less than 600 mm or~~ no less than 800 mm.

13. (currently amended) A method for grubbing stumps (38) with a stump grubber (10, 50) coupled to the lifting means (12, 52) of a work machine, with gripping means (32, 34, 36, 70) and a cutting blade (18, 58) supported on the frame (14, 54) of the stump grubber, and in which method

- the stump grubber (10, 50) is positioned above the stump (38) with the help of the lifting means (12, 52) of the work machine,

- two gripping means (70) on opposite sides of the apparatus (50) are pivoted around mainly parallel pivot axes (67),

- the stump (38) is firmly gripped by the gripping means (32, 34, 36, 70) at the side of and/or under the stump (38)[[,]] by forcing spikes or blades (32, 34, 36, 71-75) into and/or under the stump at 5 to 20 points ~~at no less than two points on the stump (38),~~

- the cutting blade (18, 58) is positioned beside the stump (38) in an at least substantially vertical position,

- the stump (38) is lifted upwards and roots growing out of the stump are severed by moving the cutting blade (18, 58) and gripping means (32, 34, 36, 70) relative to each other so that the cutting blade (18, 58) is moved downwards relative to the gripping means (32, 34, 36, 70) and the gripping means (32, 34, 36, 70) are moved upwards relative to the cutting blade (18, 58)[[,]].

~~characterised in that~~

~~the stump (38) is gripped by forcing spikes or blades (32, 34, 36, 71-75) into the stump at no less than four points on the stump (38).~~

14. (currently amended) A method according to claim 13, ~~characterised wherein~~ wherein in that in this method, the cutting blade (18) is kept at least mainly immovable in the vertical direction relative to the frame (14).

15. (currently amended) A method according to claim 13, ~~characterised wherein~~ wherein in that in this method, the gripping means (70) are kept at least mainly immovable in the vertical direction relative to the frame (54).

16. (currently amended) A method according to claim 13, ~~characterised wherein~~ wherein in that in this method, the stump (38) is supported (40) against the stump grubber, also from above.

17. (currently amended) A method according to claim 13, ~~characterised wherein~~ wherein in that the gripping means (32, 34) incorporate cutting blades (48), and that in this

method, the gripping means (32, 34, 36, 71–75) are pressed so deep into the stump (38) at its side that the stump (38) is at least partially split.

18. (currently amended) A method according to claim 13, ~~characterised~~ wherein in that the release of the stump (38) and the severing of the roots (46) is carried out using only the stump grubber's own power means (24, 56).

19. (canceled)

20. (original) A method for the prevention of fungus disease, such as root rot, prior to the planting of a seedling, characterised in that in this method, a stump (38) and the roots (46) surrounding the stump for a distance around the stump (38) are removed from the ground (44), wherein an incision is made at least for the most part around the stump (38) and directed vertically downwards into the ground (44), to a certain depth and, simultaneously, the stump (38) is lifted mainly vertically upwards at no less than four points.